Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (currently amended) An article comprising:

a mounting substrate;

a passive component site on the mounting substrate;

an active component site on the mounting substrate;

a fluid flow barrier disposed local to the passive component site and spaced apart from the active component site, the fluid flow barrier comprising an unfilled recess; and

an underfill material filling a space between the active component site and the mounting substrate, the underfill material stopping at or near an edge of the recess, the edge forming an angle directed against a flow of the fluid flow barrier.

2. (Original) The article of claim 1, the mounting substrate including a first side and a second side, wherein the passive component site and the active component site are disposed in a solder mask on the first side, and wherein the fluid flow barrier is integral with the solder mask.

3. (Original) The article of claim 1, wherein the fluid flow barrier includes a sidewall and a floor, wherein the floor includes an electrically conductive material.

4. (Original) The article of claim 1, the mounting substrate including a first side and a second side, wherein the passive component site and the active component site are disposed in a solder mask on the first side, wherein the fluid flow barrier is a trench in the solder mask, and wherein the trench describes a perimeter around the passive component site.

5. (Original) The article of claim 1, the mounting substrate including a first side and a second side, wherein the passive component site and the active component site are disposed in a solder mask on the first side, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the passive component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the active component site, and wherein the trench side that is adjacent and spaced apart from the active component site includes a non-linear boundary.

6. (Original) The article of claim 1, the mounting substrate including a first side and a second side, wherein the passive component site and the active component site are disposed in a solder mask on the first side, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the passive component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the active component site, wherein the trench side that is adjacent and spaced apart from the active component site includes a non-linear boundary, and wherein the non-linear boundary is selected from curvilinear, rectilinear, and combinations thereof.

7. (Original) The article of claim 1, wherein the passive component site is spaced apart a distance from the active component site in a range from about 5 mm to about 1 mm.

8. (Original) The article of claim 1, wherein the passive component site is spaced apart a distance from the active component site by about 1.7 mm.

9. (Original) The article of claim 1, further including at least one fluid flow barrier that is disposed general to the active component site.

10. (Original) The article of claim 1, wherein the at least one fluid flow barrier includes a trench with a dielectric floor.

Claims 1-28 (canceled)

29. (Previously Presented) The article of claim 1, wherein the passive component site is one of a plurality of passive component sites.

30. (Previously Presented) The article of claim 1, wherein the passive component site is one of a plurality of passive component sites, and wherein at least one fluid flow barrier of the plurality of passive component sites presents a non-linear boundary toward the active component site.

31. (currently amended) An article comprising:

a mounting substrate;

a first component site on the mounting substrate;

a second component site on the mounting substrate; and

a fluid flow barrier disposed local to the first component site and spaced apart from the second component site, the fluid flow barrier comprising an unfilled recess; and

an underfill material filling a space between the second component site and the mounting substrate, the underfill material stopping at or near an edge of the recess, the edge forming an angle directed against a flow of the fluid flow barrier.

32. (Previously Presented) The article of claim 31, the mounting substrate including a first side and a second side, wherein the first component site and the second component site are disposed in a solder mask on the first side, and wherein the fluid flow barrier is integral with the solder mask.

33. (Previously Presented) The article of claim 31, wherein the fluid flow barrier includes a sidewall and a floor, wherein the floor includes an electrically conductive material.

34. (Previously Presented) The article of claim 31, the mounting substrate including a first side and a second side, wherein the first component site and the second component site are disposed in a solder mask on the first side, wherein the fluid flow barrier is a

trench in the solder mask, and wherein the trench describes a perimeter around the first component site.

35. (Previously Presented) The article of claim 31, the mounting substrate including a first side and a second side, wherein the first component site and the second component site are disposed in a solder mask on the first side, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the first component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the second component site, and wherein the trench side that is adjacent and spaced apart from the second component site includes a non-linear boundary.

36. (Previously Presented) The article of claim 31, the mounting substrate including a first side and a second side, wherein the first component site and the second component site are disposed in a solder mask on the first side, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the first component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the second component site, wherein the trench side that is adjacent and spaced apart from the second component site includes a non-linear boundary, and wherein the non-linear boundary is selected from curvilinear, rectilinear, and combinations thereof.

37. (Previously Presented) The article of claim 31, wherein the first component site is spaced apart a distance from the second component site in a range from about 5 mm to about 1 mm.

38. (Previously Presented) The article of claim 31, wherein the first component site is spaced apart a distance from the second component site by about 1.7 mm.

39. (Previously Presented) The article of claim 31, further including at least one fluid flow barrier that is disposed general to the second component site.

40. (Previously Presented) The article of claim 31, wherein the at least one fluid flow barrier includes a trench with a dielectric floor.

41. (currently amended) An article comprising:

a mounting substrate including a first side and a second side, wherein the first component site and the second component site are disposed in a solder mask on the first side;

a first component site on the mounting substrate;

a second component site on the mounting substrate, wherein the first component site and the second component site are disposed in a solder mask on the first side; and

a fluid flow barrier disposed local to the first component site and spaced apart from the second component site, and wherein the fluid flow barrier is integral with the solder mask, the fluid flow barrier comprising an unfilled recess; and

an underfill material filling a space between the second component site and the mounting substrate, the underfill material stopping at or near an edge of the recess, the edge forming an angle directed against a flow of the fluid flow barrier.

42. (Previously Presented) The article of claim 41, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the first component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the second component site, wherein the trench side that is adjacent and spaced apart from the second component site includes a non-linear boundary, and wherein the non-linear boundary is selected from curvilinear, rectilinear, and combinations thereof.

43. (Previously Presented) The article of claim 41, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the first component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the second component site, wherein the trench side that is adjacent and spaced apart from the second component site includes a non-linear boundary, and wherein the non-linear boundary is a composite of rectilinear segments and curvilinear segments.

44. (Previously Presented) The article of claim 41, wherein the fluid flow barrier is a trench in the solder mask, wherein the trench describes a perimeter around the first component site, wherein the perimeter includes a trench side that is adjacent and spaced apart from the second component site, wherein the trench side that is adjacent and spaced apart from the second component site includes an interior obtuse angle.

45. (Previously Presented) The article of claim 41, wherein the first component site is one of a plurality of first component sites.

46. (Previously Presented) The article of claim 41, wherein the first component site is one of a plurality of first component sites, and wherein at least one fluid flow barrier of the plurality of first component sites presents a non-linear boundary toward the second component site.